

BINSWANGER'S
NULOCK-SYSTEM
STORE FRONTS



INTRODUCING

A Store Front Glass Setting that

Will Not Break the Glass

BINSWANGER & CO.
INCORPORATED

RICHMOND-MEMPHIS-HOUSTON-MIAMI

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IN COPPER
also
PLAIN — ORNAMENTAL
and
EXTRUDED BRONZE

Nulock Automatic Screw Control Store Fronts

A new departure in Store Front Construction whereby the metal pressure upon the glass is automatically fixed.

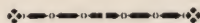
The amount of pressure is not left to guesswork as is the customary procedure, but is absolutely uniform at the point of contact, throughout the entire member.

The novice can do a thorough job of fitting as well as the expert, and results in every case must be the same.

The grip on the glass is firm enough to take care of vibration, yet elastic enough to allow for expansion and contraction.

A new combination of ideas that renders efficiency, permits quick and easy installation, yet assures absolute safety.

THE NEW AND SAFE WAY



BINSWANGER & Co.
INCORPORATED

RICHMOND-MEMPHIS-HOUSTON-MIAMI



SAFETY, ECONOMY, EFFICIENCY AND ARCHITECTURAL BEAUTY IN NULOCK STORE FRONT CONSTRUCTION

From details given on following pages it will be noted that in keeping with the times, Nulock Store Front Construction presents an advanced step over anything heretofore produced.

We claim safety for reason of the Automatic Screw Control. This is a new departure in fastening members, where the virtues of the screw are retained, while its vices are eliminated. There is an average of 32 screws used in setting every plate of glass, and with old style construction each screw is a hazard. Nulock Construction releases the Jobber from responsibility and assures safety to the user.

We claim economy because in our factory recently completed we have incorporated only the latest and most efficient machinery. Such equipment enables us to produce a superior store front, one surpassing anything now on the market, at a reasonable price. There is further economy because in Nulock Fronts all unnecessary material has been eliminated, because we produce only one type of construction, and because metal used in this construction is heavy enough to answer every purpose, including SELF SUPPORTING SASH.

We claim efficiency through this one type construction and through our special Corner and Division Bars, where the original bar is used in all construction, and added strength is secured by the simple addition of reinforcing bars. This all means simple installation, and a minimum investment by the Jobber in carrying the necessary stock for his requirements.

Last, but equally important with other merits of Nulock Fronts, is architectural beauty of design. This becomes obvious upon referring to a corner construction shown on the following page.

Note the beauty of design shown in our Sash Face. Massive in appearance and higher than ordinarily used, giving sufficient depth of rabbet to care for the largest glass, yet in no way cumbersome.

Note the plain yet ornamental design used in our Bar Face, which represents the long stream lines so suggestive of height.

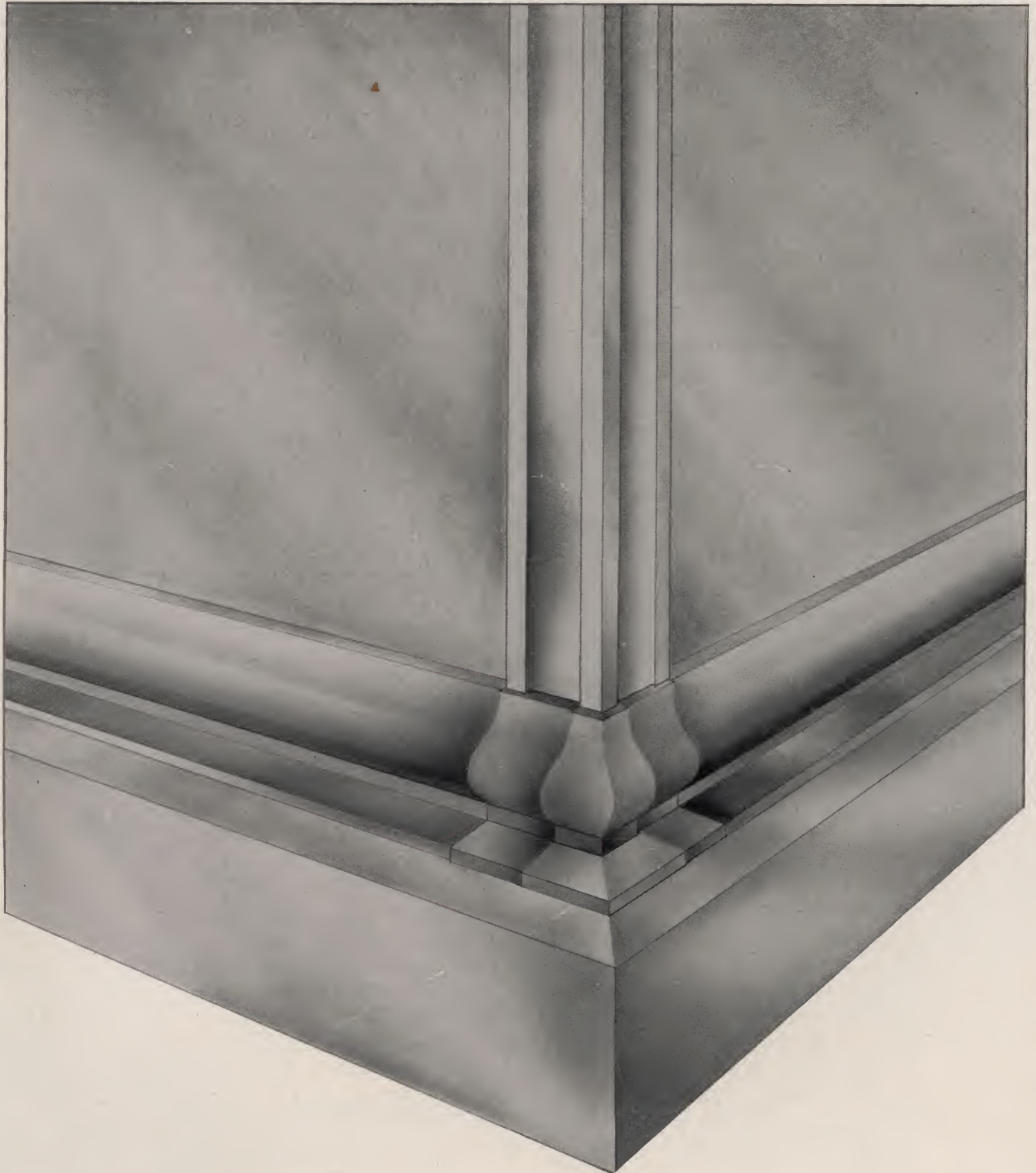
Note the ornamental Corner Caps, where we have digressed from the plain mitre cap ordinarily used, and have provided a cap with an embossed mitre, forming a more ornamental connection between sash and bar.

When to safety, economy and efficiency can be added architectural beauty, it means perfection in construction, and for this reason Nulock Fronts will merit the consideration of the Architect and Jobber.

The various features of Automatic Screw Control as applied to Nulock Sash and Bars are fully covered by patents, and this modern construction is produced only by the Sioux Metal Products Company.

It is our policy to distribute Nulock Fronts exclusively through Glass Jobbers, and to give each Jobber co-operation in such distribution.

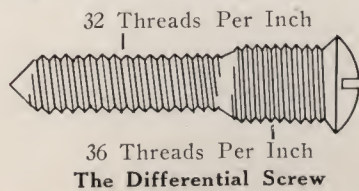
BINSWANGER'S
NULOCK-SYSTEM
— STORE FRONTS —



Corner Elevation Showing Architectural Lines of Nulock Construction.

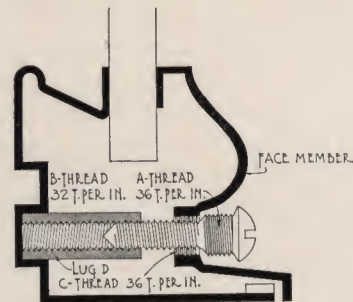
AUTOMATIC SCREW CONTROL ON SASH

This Automatic Screw Control is one of the salient features of Nulock Store Front Construction. It is simple yet absolutely automatic in action.



The shank of the screw is slightly less diameter than the shoulder, and is threaded 32, while the shoulder or thicker portion is threaded 36. A lug threaded 32 is provided in the back member to receive the shank of the screw, while the face member is threaded 36 to receive the shoulder portion. This thread differential automatically applies a pre-determined pressure. It is simply necessary to hold the outer member lightly against the glass, and then drive the screw completely home. When the head of the screw comes closely in contact with the outside member the operation is complete, and the mould has automatically been drawn into position and locked. It always does just that, no more, no less. It is impossible to draw the screw too tight. That is why we call it—**AUTOMATIC SCREW CONTROL.**

The contact of the metal mould is absolutely uniform throughout its entire length. There is no uneven pressure, no distortion of glass to cause breakage. The pressure provided together with the spring of the metal is just enough to allow for all expansion and contraction. It constantly holds the glass in a firm yet gentle clasp. Gentle enough to care for all vibration, yet firm enough to assure rigidity. It is automatically adjustable to uneven glass, regardless of thickness.



No. 5 Sash with Members in Place Ready for Screw Adjustments

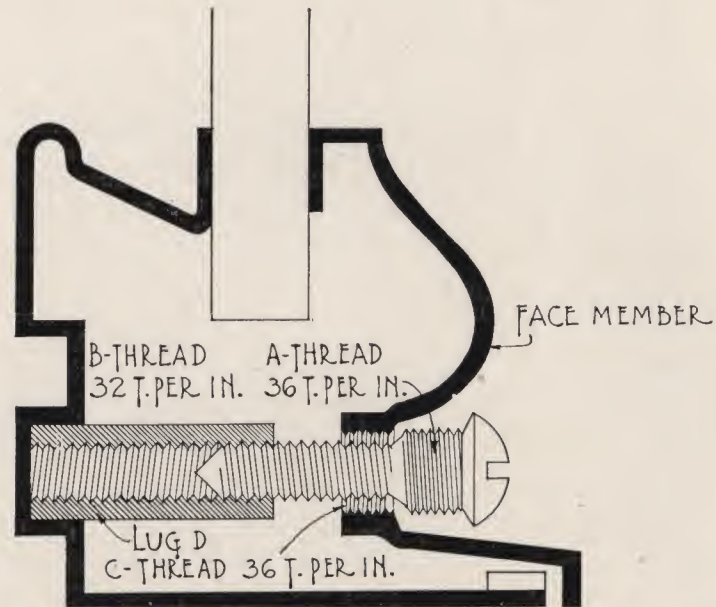
Breakage For Reason of Strain Is Practically Impossible

The process of installation is easy and very simple. With the exception of handling the glass it could well be termed a **ONE MAN SETTING.**

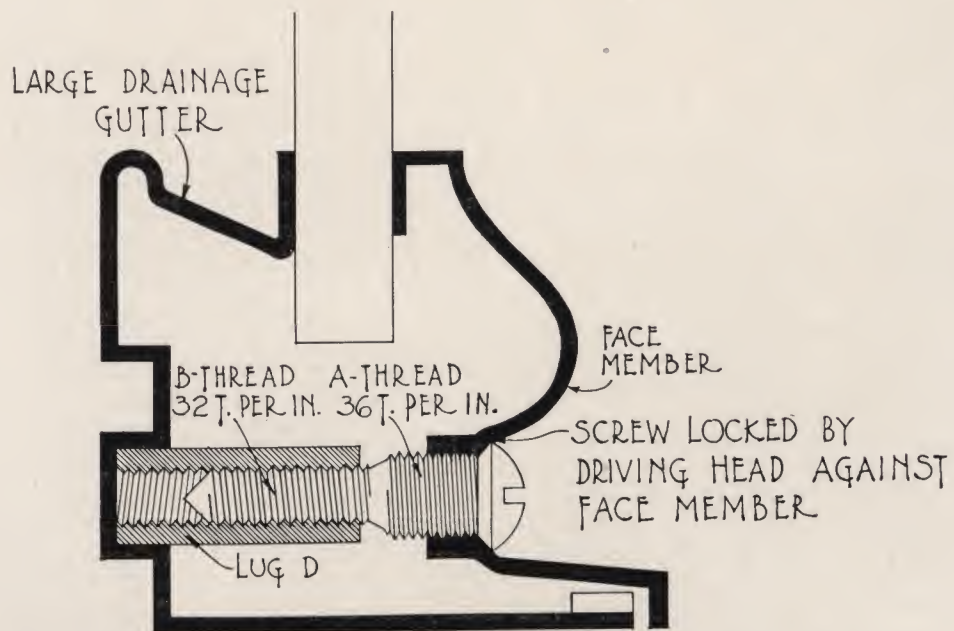
There is another feature of this screw that is important, and that is that it remains absolutely rigid. Being threaded in the back lug and again in the front member with the head tight against the metal, the screw is firmly locked. It is not subject to loosening from the constant vibration to which all glass is subjected, and which will in time loosen the ordinary screw.

The Automatic Screw Control used in Nulock Construction fills a long felt want. Where a number of screws must be set in one member, even the best mechanic cannot secure uniform pressure. There must be more pressure on one screw than on another, and when uneven pressure is used in connection with glass, it is always objectionable. In Nulock Construction this objection is entirely overcome, and in this feature alone we claim an advance over any store front now on the market.

DETAILED SECTION OF NULOCK SASH CONSTRUCTION
 Showing Automatic Screw Control

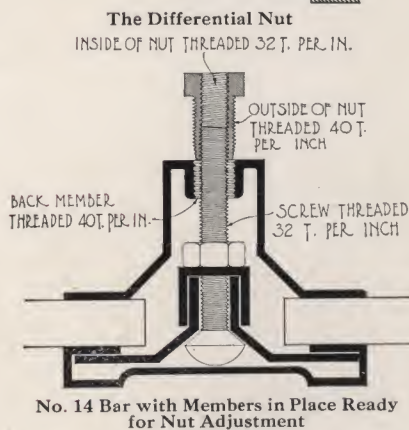
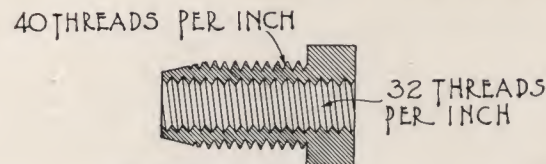


Enlarged section of Nulock Sash with mould against glass ready for screw adjustment

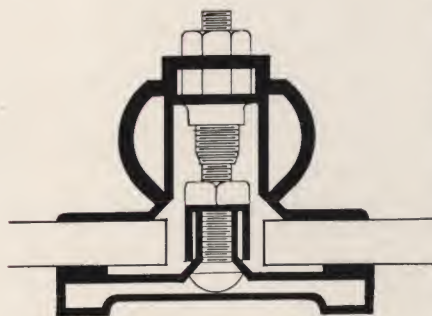


Enlarged section of Nulock Sash with screw adjusted, locked, and with mould drawn into correct position.

AUTOMATIC SCREW CONTROL ON CORNER AND DIVISION BARS



"A" REINFORCING



NO 14 DIVISION BAR
 WITH "A" REINFORCING

the same amount of metal. This theory has been developed in NULOCK CONSTRUCTION.

For Transom Glass we recommend our No. 14 Bar which is our lightest construction, and a drawing of which will be found on this page. For glass from 6 feet to 7 feet 6 inches, we recommend that Bar No. 14 be strengthened with our Reinforcing Bar No. A.

Where the glass is larger than 7 feet 6 inches the bar should be further

THE AUTOMATIC SCREW CONTROL FEATURED IN NULOCK SASH CONSTRUCTION is also applied in Corner and Division Bars, the result being secured with a machine screw and threaded nut. The

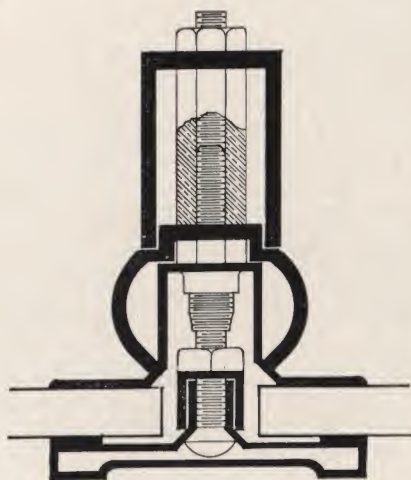
inside of this nut is threaded 32 to correspond with the machine screw on which it operates, while the outer surface of the nut as well as the copper back member which receives it, are threaded 40. This thread differential again creates a difference in the pull, slightly greater than in our sash construction, it being a well known fact that for durable construction both the Corner and Division Bars must hold glass in a firmer clasp than the sash.

However, like our Sash, proper pressure is controlled, and nothing is left to chance. The thread differential is figured to a mathematical certainty. It is simply necessary to hold the back member lightly against the glass, and then start the nut into the thread which has been provided. When this nut has been driven completely home with shoulders against the back member the operation is complete. The back member has then been drawn against the glass with just enough tension to hold it firmly, yet not too tight. Every nut will exert exactly the same pressure throughout the entire member, entirely eliminating distortion and breakage of glass. This operation is absolutely automatic. It is impossible to drive the nut too far, just as it is impossible to have it too loose when the nut is firmly drawn against the metal. This is simple and safe construction, something heretofore unknown in store front construction, particularly as applied to Corner and Division Bars.

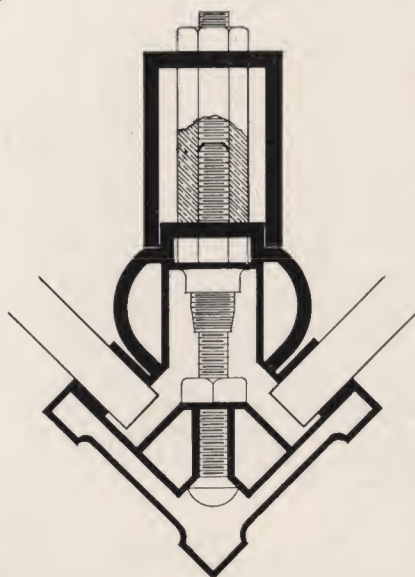
There is another feature of Nulock Construction as applied to Corner and Division Bars that must have its appeal to builders as well as jobbers, and that is our method of reinforcing to care for varying conditions. It is a fact well known by every builder that the union of several members develops greater strength, than a single member carrying



"B" REINFORCING



NO 14 DIVISION BAR
 WITH "A" AND "B" REINFORCING



NO 2 CORNER BAR WITH
 "A" AND "B" REINFORCING

strengthened with reinforcing Bar No. B.

When thus reinforced our bars will care for any size plate. At the same time if for any reason still stronger bars are desired for special construction, it is only necessary to add another reinforcing Bar No. B, which can readily be done with the lug and nut system. In making such additions none of the previous bars installed or the adjustment of same need be disturbed. This will be found particularly convenient if for any reason original installation is found too weak to stand the strain for which it was intended, or if for any other reason they are to be strengthened. This is a simple yet efficient method, and eliminates the necessity of carrying in stock different styles of bars to care for these varying conditions.

It will be noted that the delicate glass adjustment is entirely completed with our No. 14 Bar. Subsequent members added for reinforcing have no influence on this adjustment, and can therefore, be drawn as tightly as desired. This construction results in a particularly firm and rigid bar. This rigidity being augmented by the strong connecting lug used. It will be noted particularly in the fastening of Bar No. B, how the lug finds long contact with the connecting machine screw, and how the outer nut permits the drawing of this bar closely and snugly against the shoulder of the lug as well as Bar No. A. This construction assures absolute rigidity.

It will also be noted that our Corner Bar construction incorporates a channel guard of pliable copper to prevent the glass from coming in contact with the fastening screws during the glazing operation or thereafter. This is a feature of safety that is well worth considering.

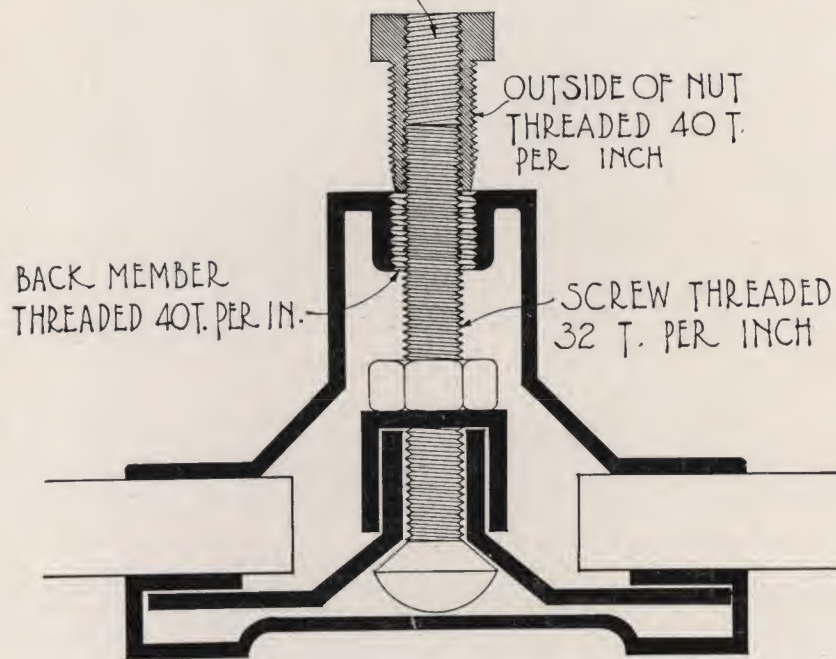
Where window glass is buffeted by winds, subject to constant vibration and rapid changes in temperature, it is only natural that faulty window settings should be responsible for tremendous annual loss due to plate breakage. These difficulties are all overcome in NULOCK CONSTRUCTION. Throughout our entire line of Sash, Corner and Division Bars, will be found.

**SAFETY, SIMPLICITY, ECONOMY,
 DURABILITY AND STRENGTH**

DETAILED SECTION OF NULOCK BAR CONSTRUCTION

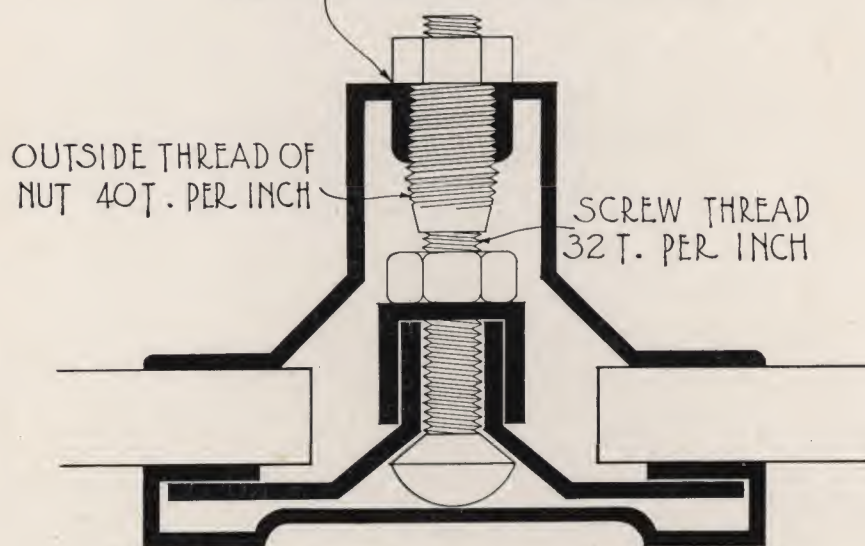
Showing Automatic Screw Control

INSIDE OF NUT THREADED 32 T. PER IN.



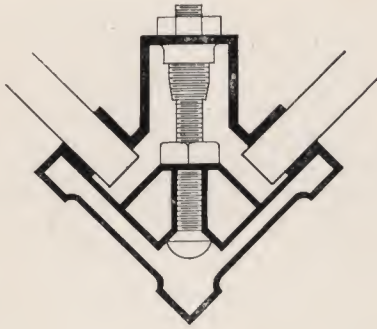
Enlarged section of Nulock Bar with back member against glass ready for nut adjustment.

NUT LOCKED BY DRIVING HEAD
 TIGHTLY AGAINST BACK MEMBER

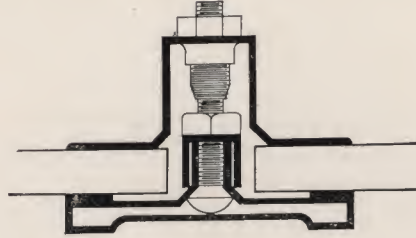


Enlarged section of Nulock Bar with nut adjusted, locked and with back member drawn into correct position

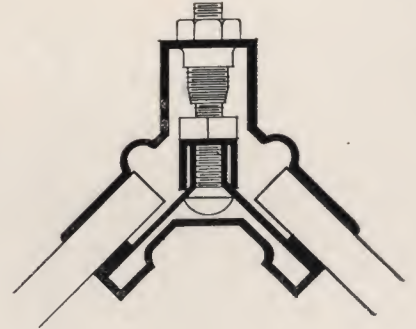
CORNER, DIVISION AND REVERSE BARS



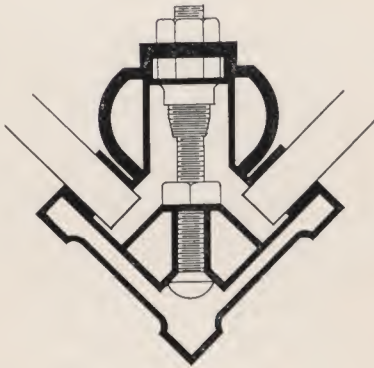
No 2 CORNER BAR



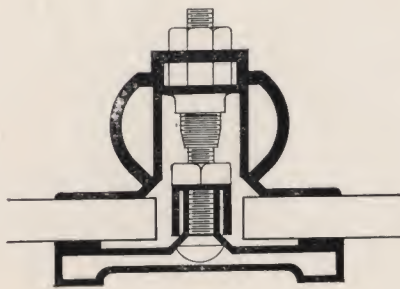
No 14 DIVISION BAR



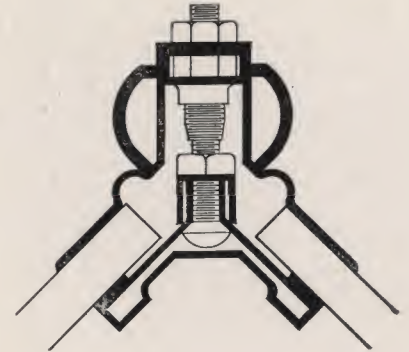
No 8 REVERSE BAR



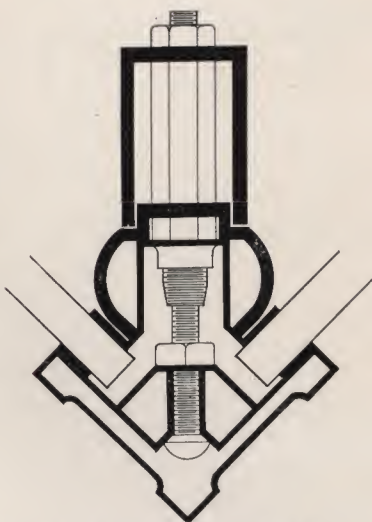
No 2 CORNER BAR
 WITH "A" REINFORCING



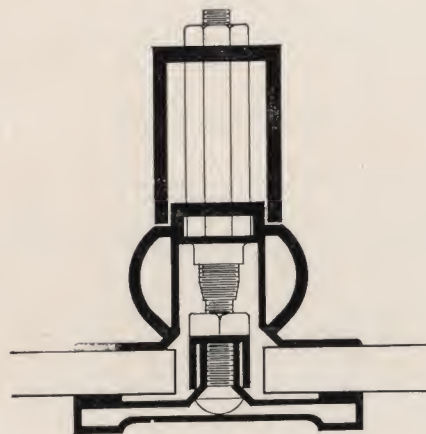
No 14 DIVISION BAR
 WITH "A" REINFORCING



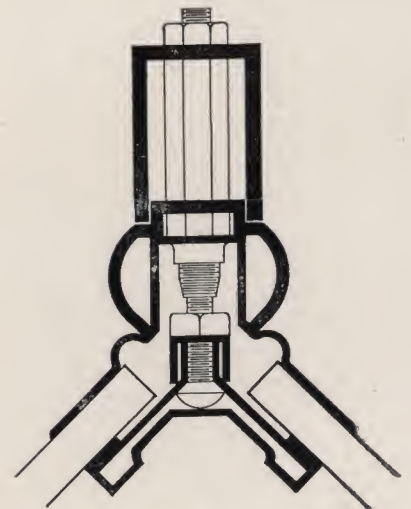
No 8 REVERSE BAR
 WITH "A" REINFORCING



No 2 CORNER BAR
 WITH "A" AND "B" REINFORCING

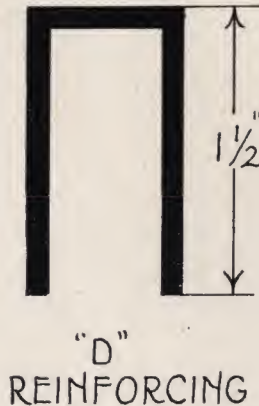


No 14 DIVISION BAR
 WITH "A" AND "B" REINFORCING



No 8 REVERSE BAR
 WITH "A" AND "B" REINFORCING

SPECIAL REINFORCING



A combination of Reinforcing bars A & B as shown on the preceding page are strong enough to care for practically any situation. However, there are extreme cases of special stress where something still stronger may be required, and to care for this situation we have prepared still another special Reinforcing bar which we designate as "D." This bar is 1 1/2" in depth made up in either .109 Steel or Bronze, and its strength is ample to care for the most extreme condition.

Architects and Builders often overlook the fact that the size of plates should be proportioned to the wind pressure they must sustain. As glass increases in size the strength diminishes very rapidly, and it is therefore essential that the glass be not only properly proportioned, but that sufficient support and strength be given each plate installed. We suggest the following Nulock Bars and Reinforcements to care for various size plates.

CORNER BARS

- No. 2 —Up to 72" high, not over 28 sq. ft. largest plate.
- No. 2A —Up to 84" high, not over 42 sq. ft. largest plate.
- No. 2AB—Up to 108" high, not over 80 sq. ft. largest plate.

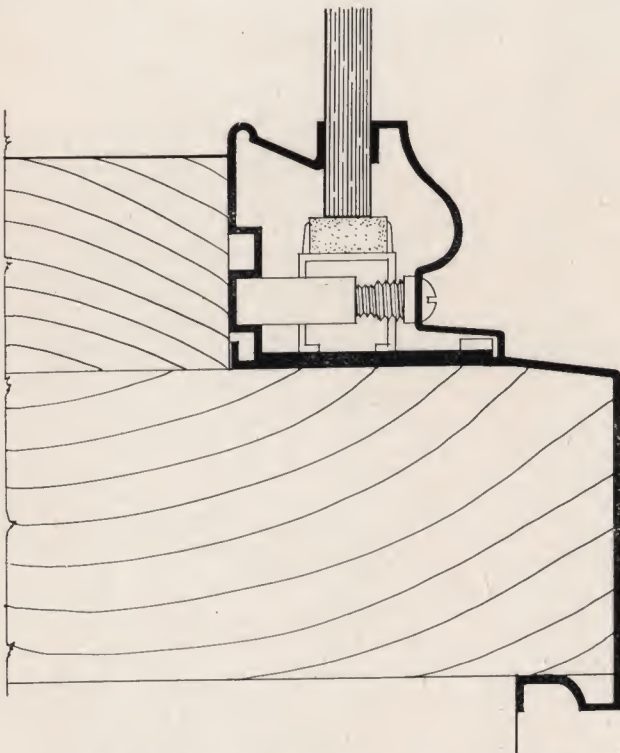
DIVISION BARS

- No. 14 —Up to 48" high in transom.
- No. 14A —Up to 72" high, not over 42 sq. ft. largest plate.
- No. 14AB—Up to 108" high, not over 72 sq. ft. largest plate.

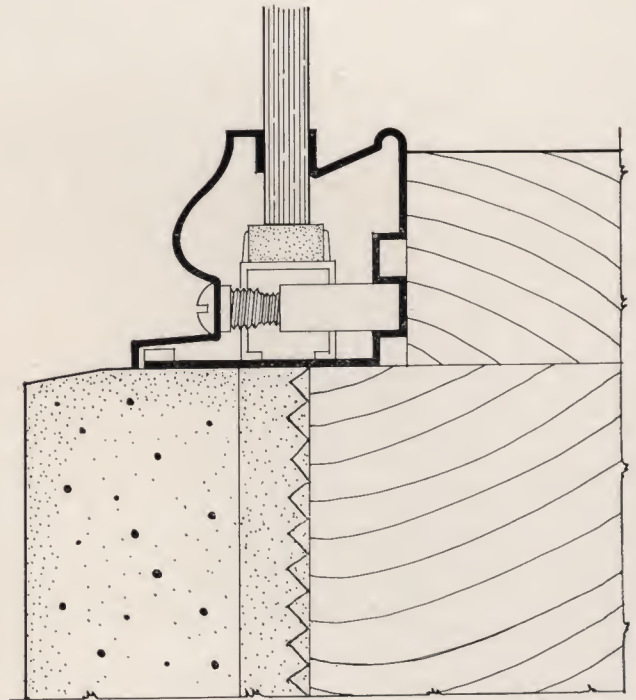
REVERSE CORNER BARS

- No. 8 —Up to 72" high, not over 28 sq. ft. largest plate.
- No. 8A —Up to 84" high, not over 42 sq. ft. largest plate.
- No. 8AB—Up to 108" high, not over 80 sq. ft. largest plate.

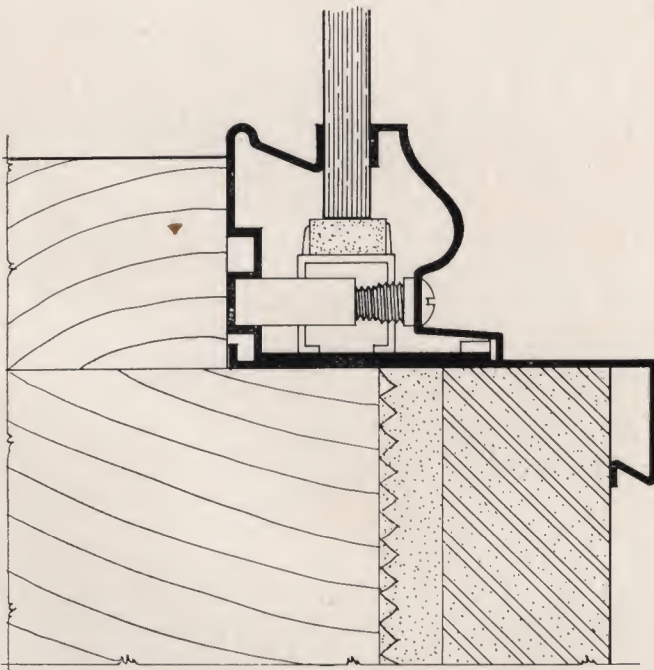
SASH SECTIONS



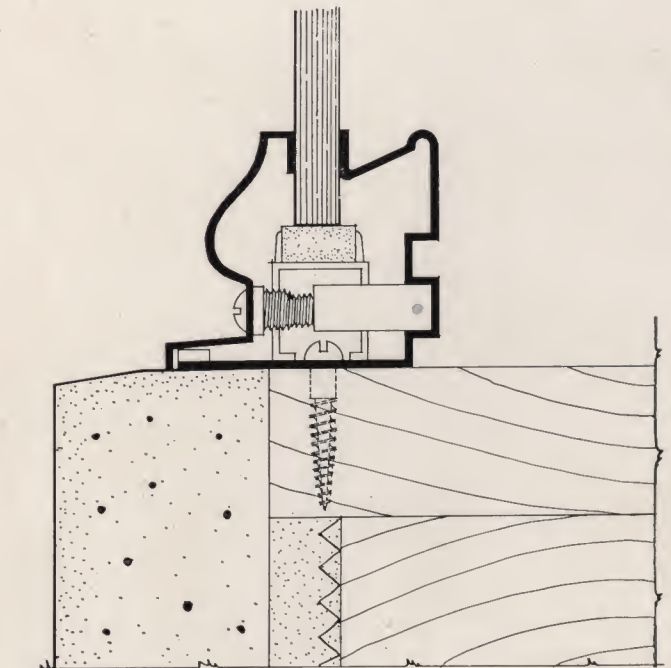
NO.5 SASH WITH NO.50 SILL COVER



NO.5 SASH

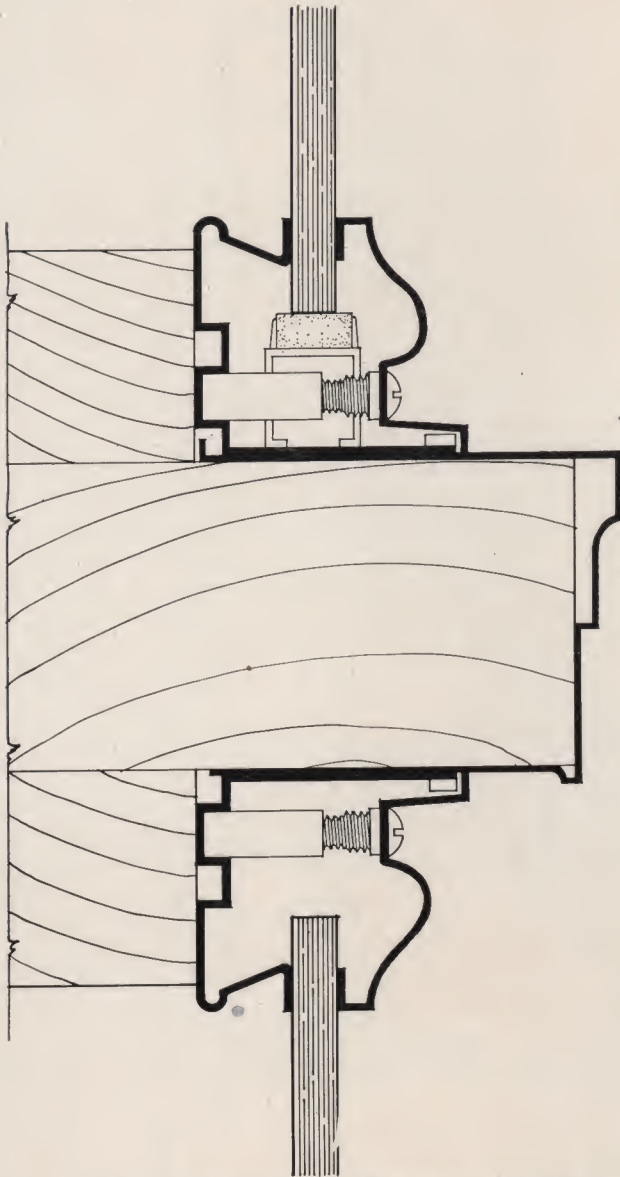


NO.5. SASH WITH NO.60 SILL COVER

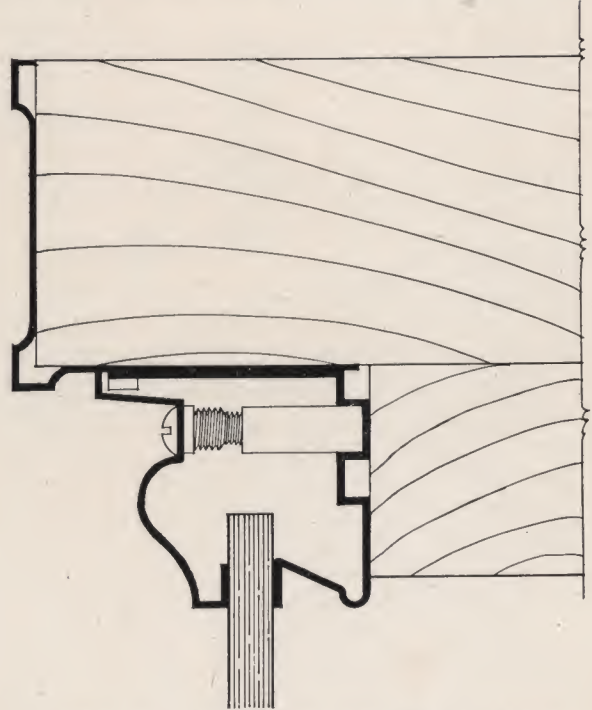


NO.5 SELF SUPPORTING SASH

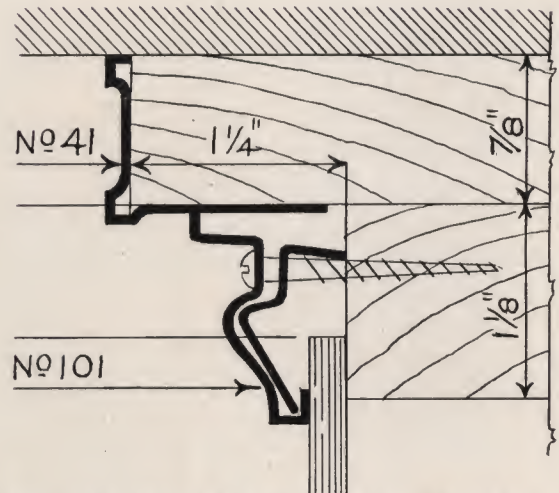
SIDE JAMB, HEAD JAMB AND TRANSOM BAR



NO. 100 TRANSOM BAR COVER
 WITH NO. 5 SASH



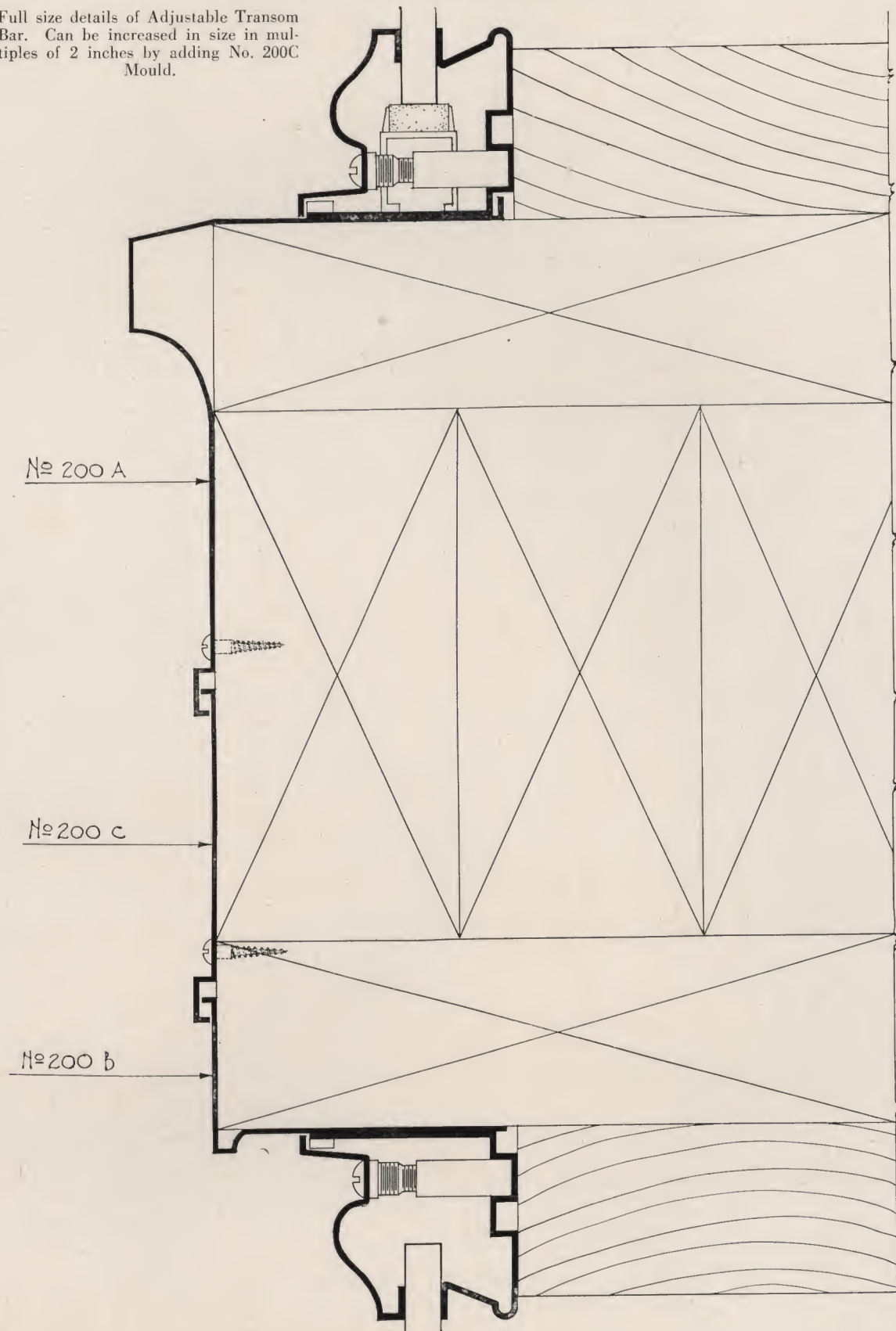
NO. 31 HEAD AND SIDE JAMB
 COVER
 WITH NO. 5 SASH



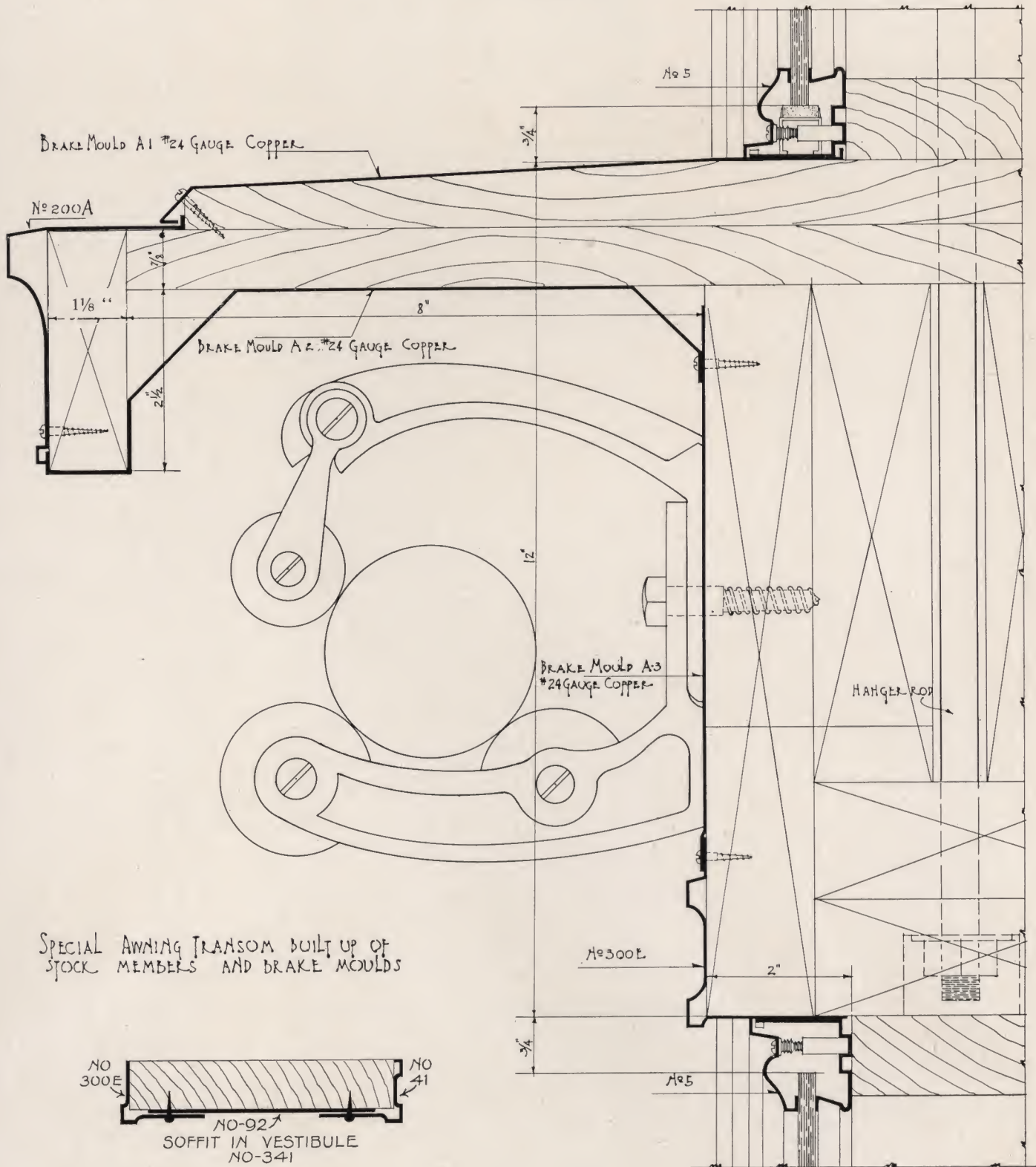
NO-41 HEAD AND SIDE JAMB
 NO-101 CAN BE USED AT TOP
 AND SIDE OF TRANSOM GLASS

NO. 200 TRANSOM BAR
 WITH NO. 5 SASH

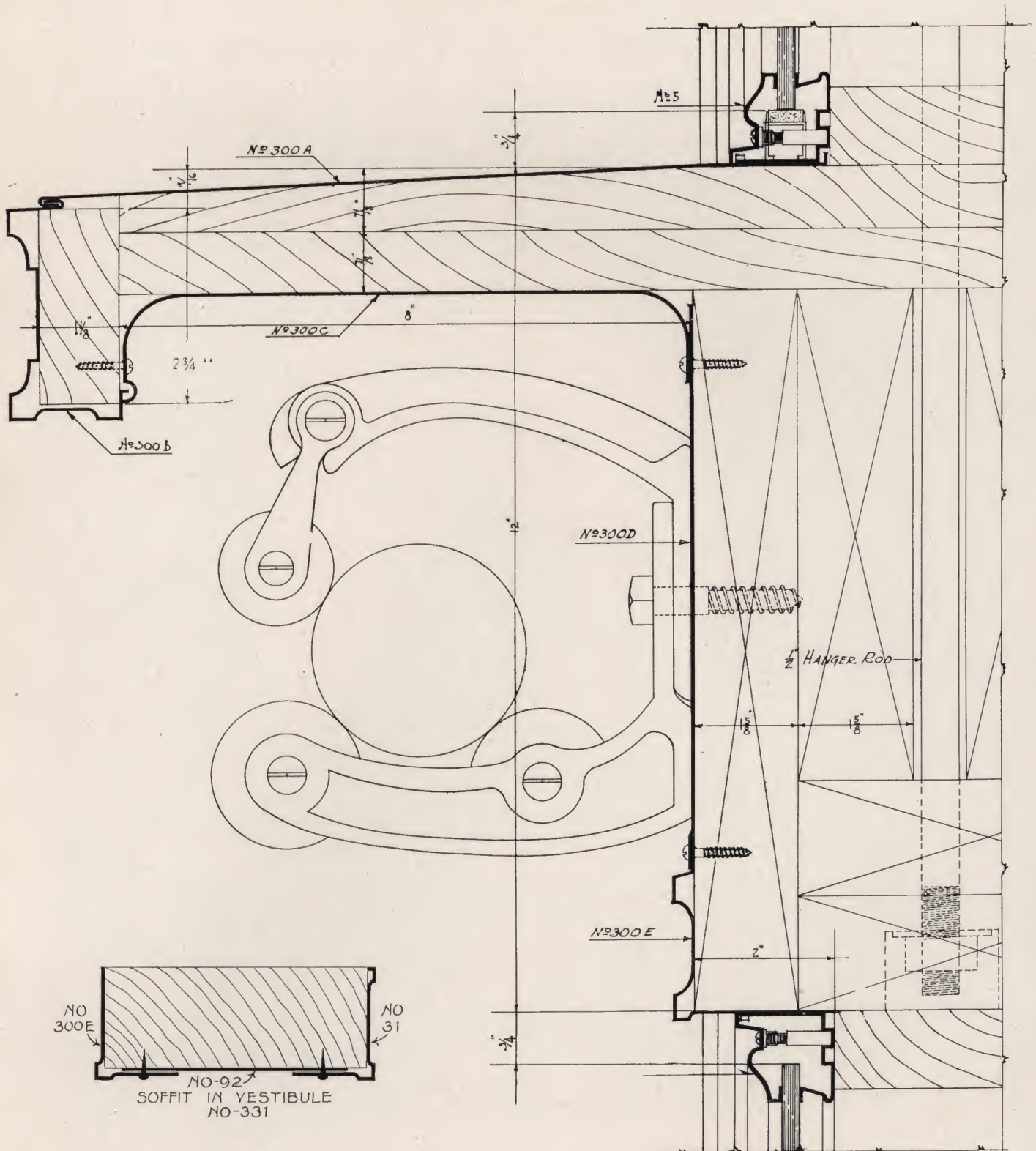
Full size details of Adjustable Transom Bar. Can be increased in size in multiples of 2 inches by adding No. 200C Mould.



NO. 250 AWNING TRANSOM
 WITH NO. 5 SASH



NO. 300 AWNING TRANSOM
 WITH NO. 5 SASH



This Awning Transom is designed for work that requires an especially attractive appearance. All members are heavy gauge copper.

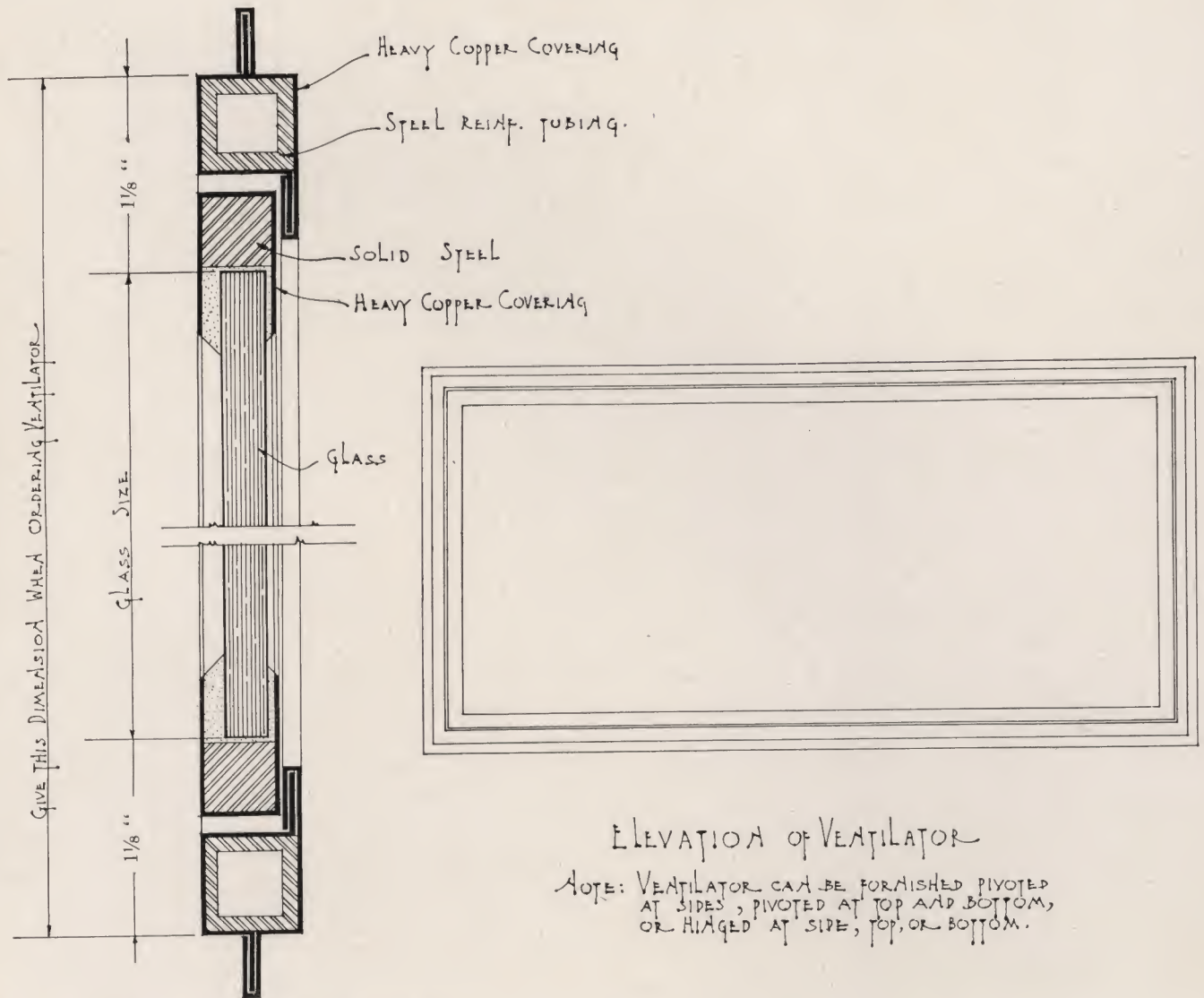


SALIENT BREVITIES OF NULOCK CONSTRUCTION

- 1—Sash Members connected with an automatically controlled screw which creates an exact predetermined pressure regardless of conditions. Glass held firmly and uniformly, eliminating glass breakage. Screws firmly locked. Metal used unusually heavy, fitting standard sash for any purpose including SELF SUPPORTING. Ample glass rabbet. Easily and quickly installed.
- 2—Large V shaped gutters with ample openings to assure speedy drainage of water and free ventilation. Vents so baffled that a minimum amount of dust gains access.
- 3—All Bar Members connected with an automatically controlled screw and nut. Uniformly correct pressure exerted throughout the entire member. Glass held firmly, yet breakage through uneven pressure practically impossible. Adjustable to any size glass, or glass that is uneven. Ample glass rabbet. Easily installed.
- 4—Double threaded firmly locked bar screws. Constant vibration to which these members are subjected will never loosen them.
- 5—Bar Tension Plates and Screws assembled in correct position to match opposing member. Placed firmly enough to hold this position, yet easily moved. Screw heads held firmly without soldering.
- 6—Bar strength secured by addition of reinforcing bars. Heavy lugs and nuts result in particularly rigid construction. Reinforcement can be drawn as tight as desired without disturbing delicate glass adjustment of original bar. Same reinforcement used on all type of bars, reducing stock required for bar construction to a minimum.
- 7—Reinforcement Bars constructed from heavy steel enameled within and without to prolong life of member. More lasting than steel copper coated. Solid Bronze reinforcing bars supplied if desired.
- 8—Corner Caps designed with embossed mitre, forming more ornamental connection between sash and bar. Reverse Caps constructed without sharp angles, eliminating a cache for dirt and permitting easy cleaning and polishing.
- 9—Glass edges fully protected in all bars by pliable copper guards. In sash by square lugs, should there be distortion of sash through uneven settlement of building.
- 10—All tie members and screws of brass or bronze and non-corrosive. Bar Anchors strong yet simple, and entirely concealed when used with B reinforcing.
- 11—All coverings correctly designed of heavy gauge metal and accommodated to stock framing lumber. Framing details simple and easily understood.
- 12—Simple yet beautiful in architectural design. Easy, quick and safe to install.

Twelve salient features of Nulock Construction, and well worth considering when planning a store front.

NO. 20 TRANSOM VENTILATORS



VERTICAL SECTION THRU VENTILATOR,
 PLAN SIMILAR, SCALE ~ FULL SIZE

ELEVATION OF VENTILATOR
 NOTE: VENTILATOR CAN BE FURNISHED PIVOTED
 AT SIDES, PIVOTED AT TOP AND BOTTOM,
 OR HINGED AT SIDE, TOP, OR BOTTOM.

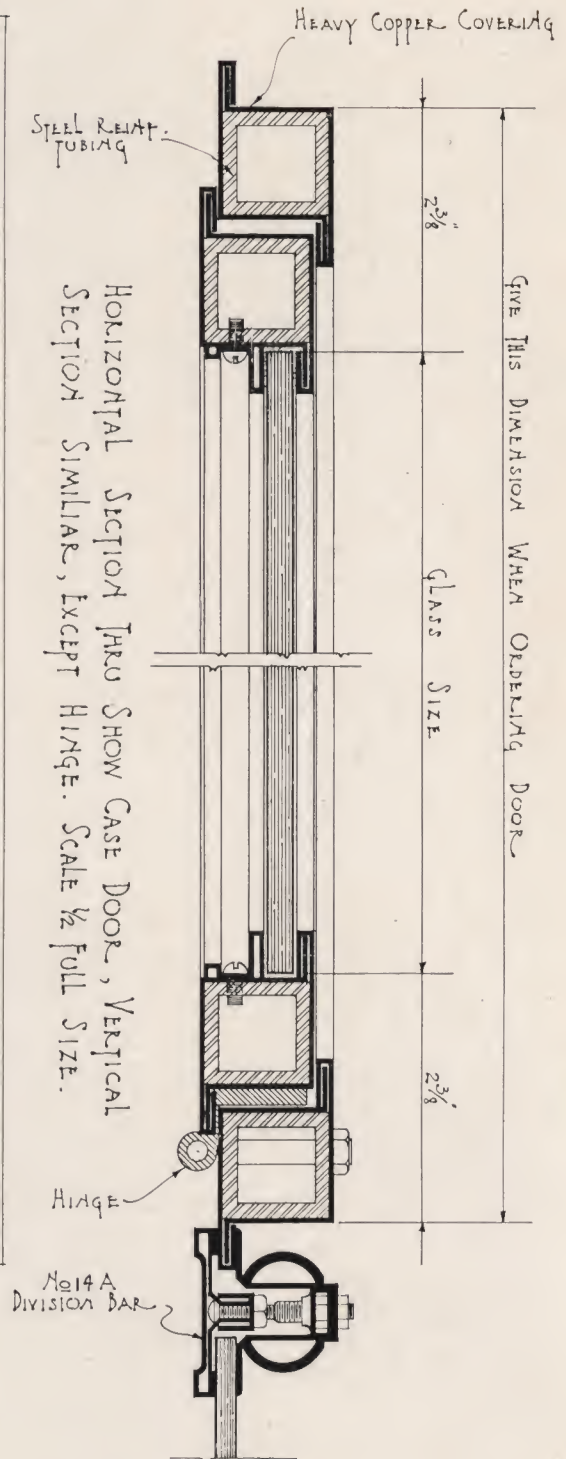
Ventilator Frames are constructed of heavy square steel tubing covered with .032 copper. All corners are heavily reinforced. Inner frame is a solid welded section of $\frac{3}{8} \times \frac{3}{8}$ inch cold rolled steel, with channel glass supporting section of .040 copper.

The sturdy construction of these Ventilators permits their use with plates up to an area of 12 square feet.

NO. 10 SHOW CASE DOORS

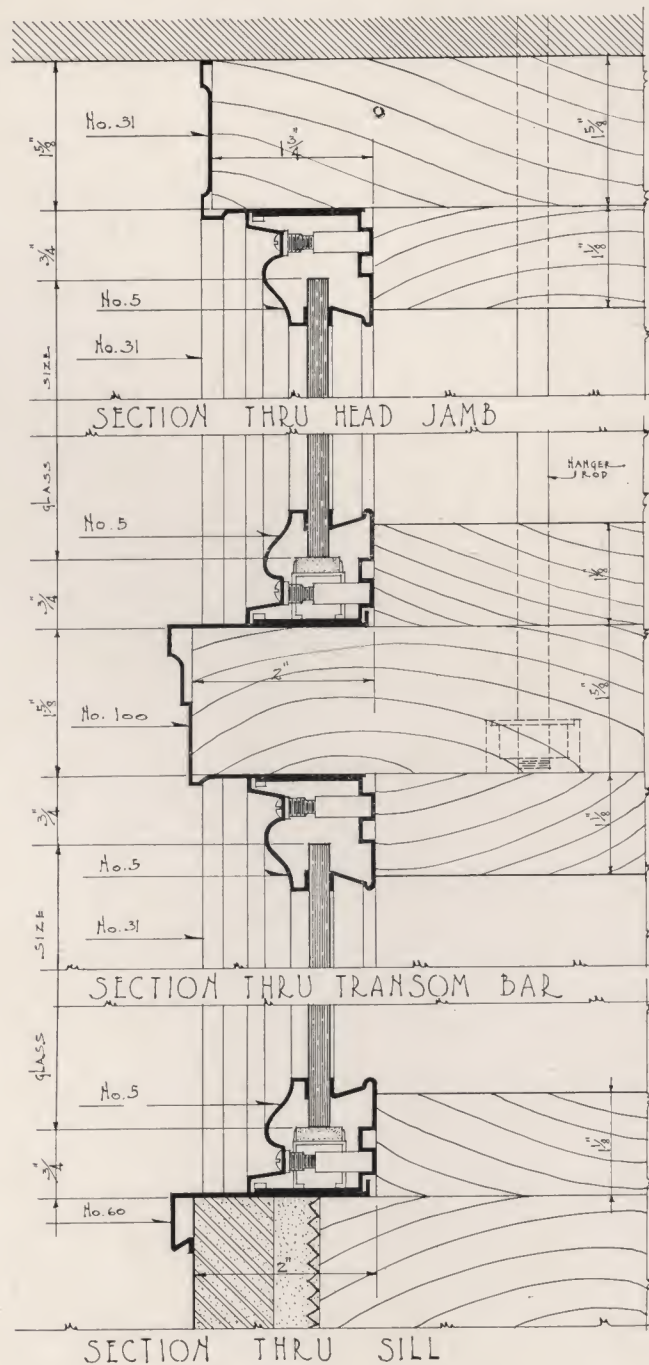
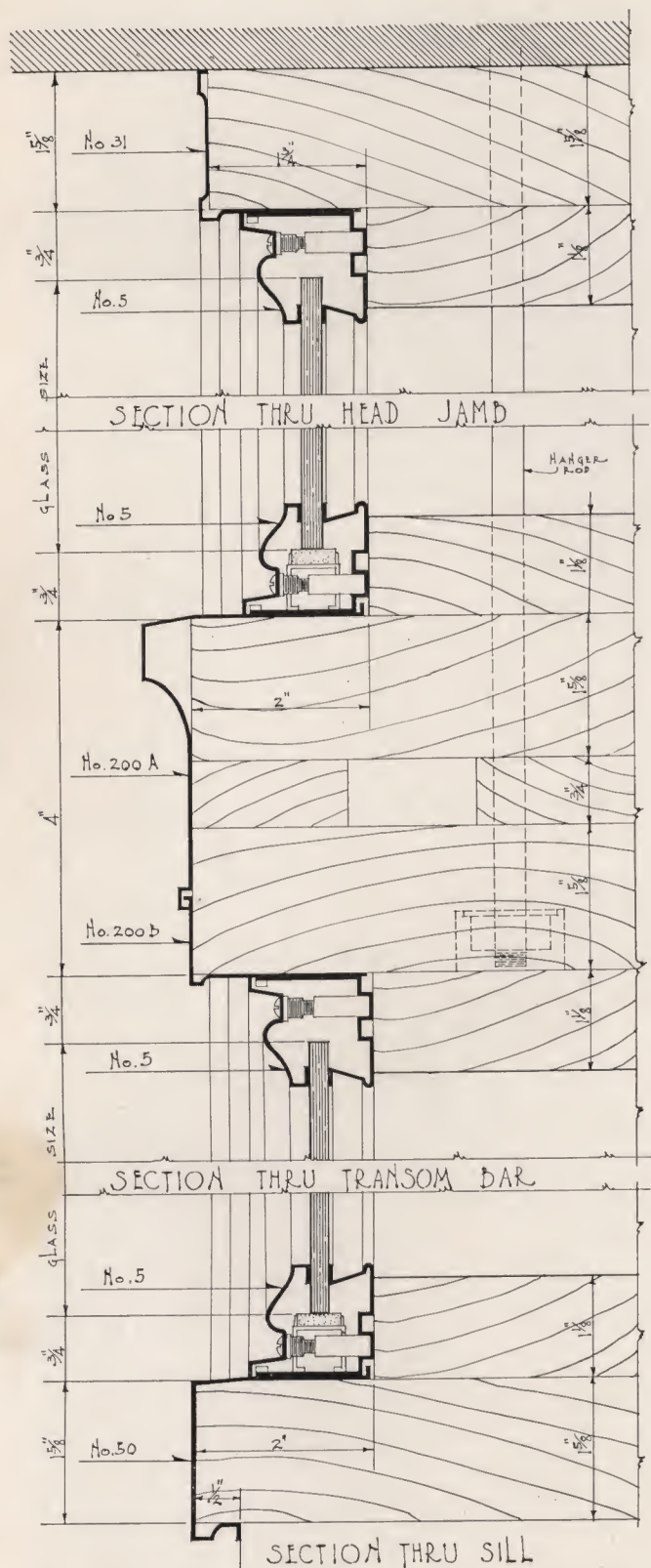


ELEVATION OF SHOW CASE DOOR



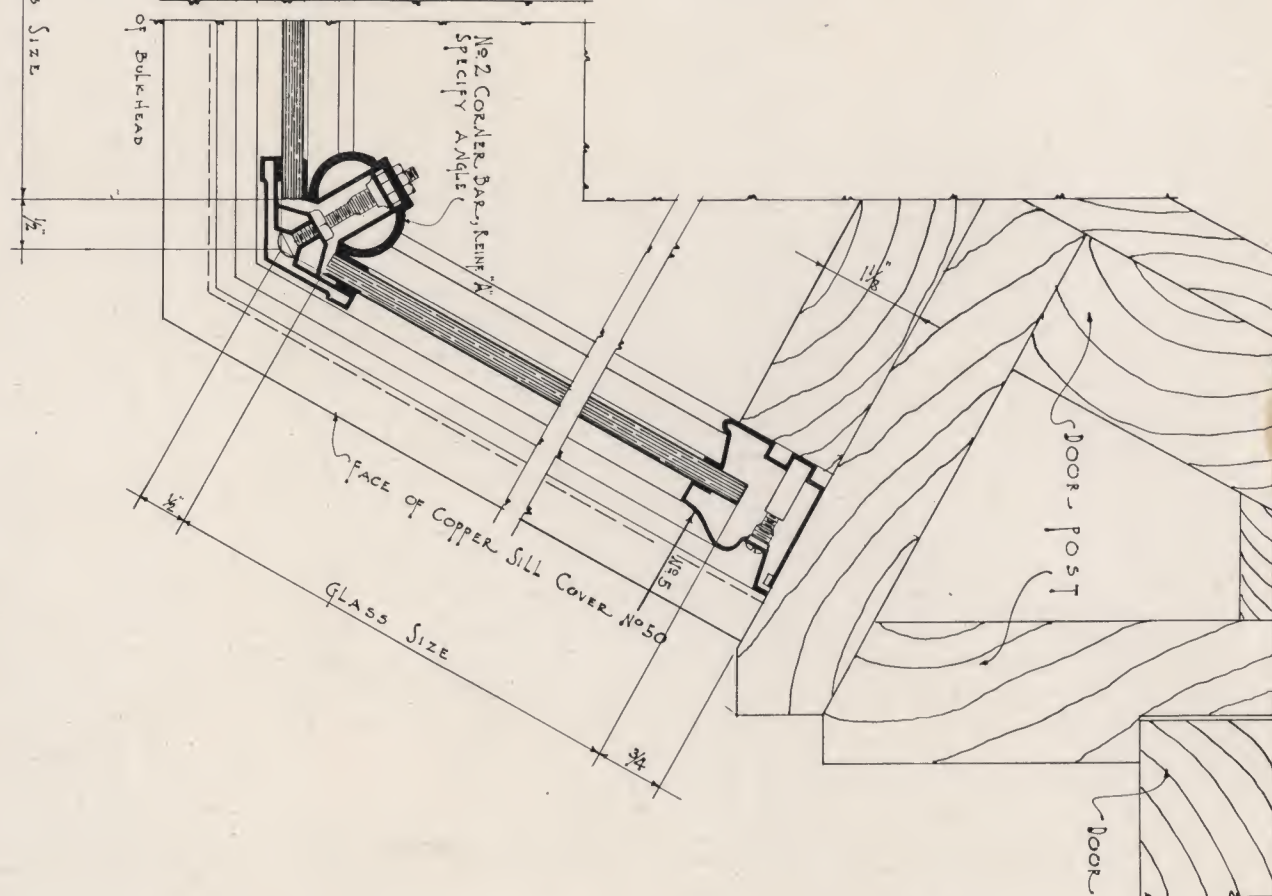
These doors are constructed of 1x1/8 inch square steel tubing covered throughout with .032 copper, and are of sufficient strength to handle the largest plates.

VERTICAL SECTIONS

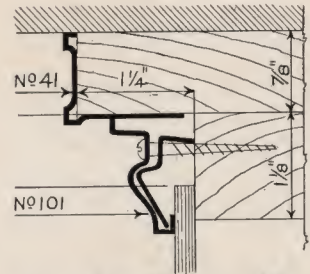
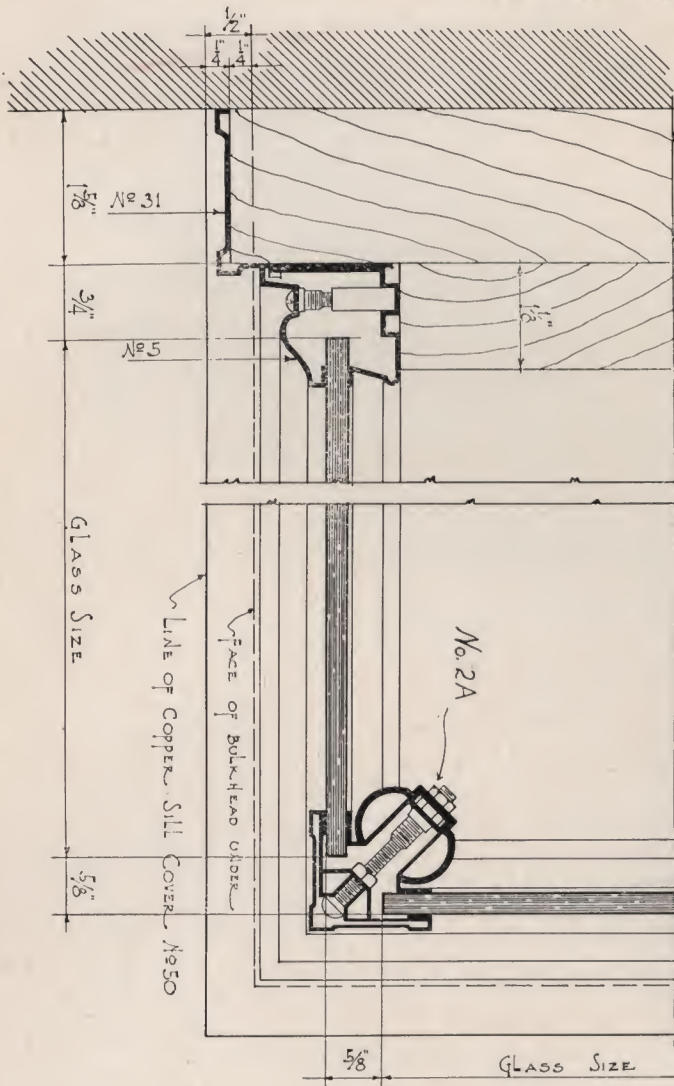


Details showing Nulock Sash with copper covered head and side jamb, and copper covered 1 5/8 inch Transom Bar.
 No. 60 Sill Cover is shown and used in connection with marble or tile bulk head.

Details showing Nulock Sash with copper covered head and side jambs, and copper covered 4 inch Adjustable Transom Bar.

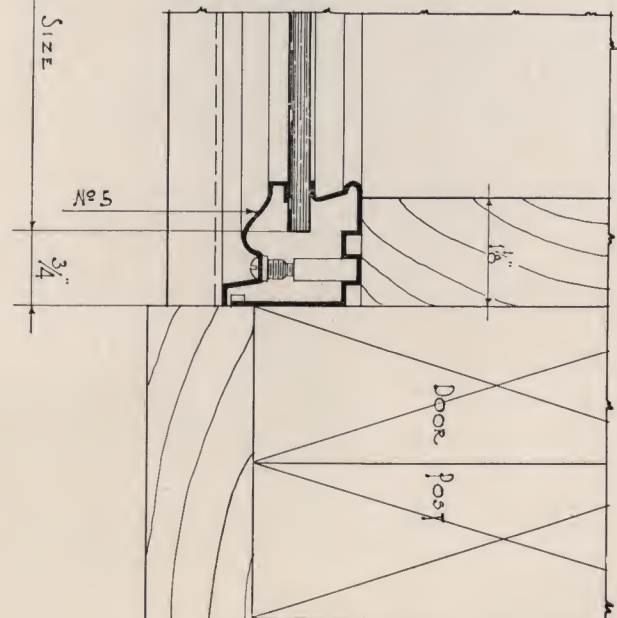
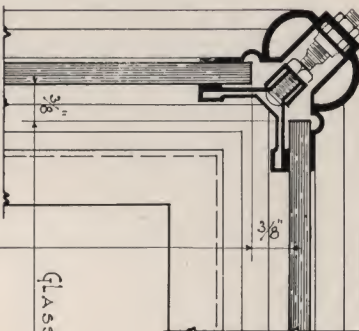


HORIZONTAL SECTION



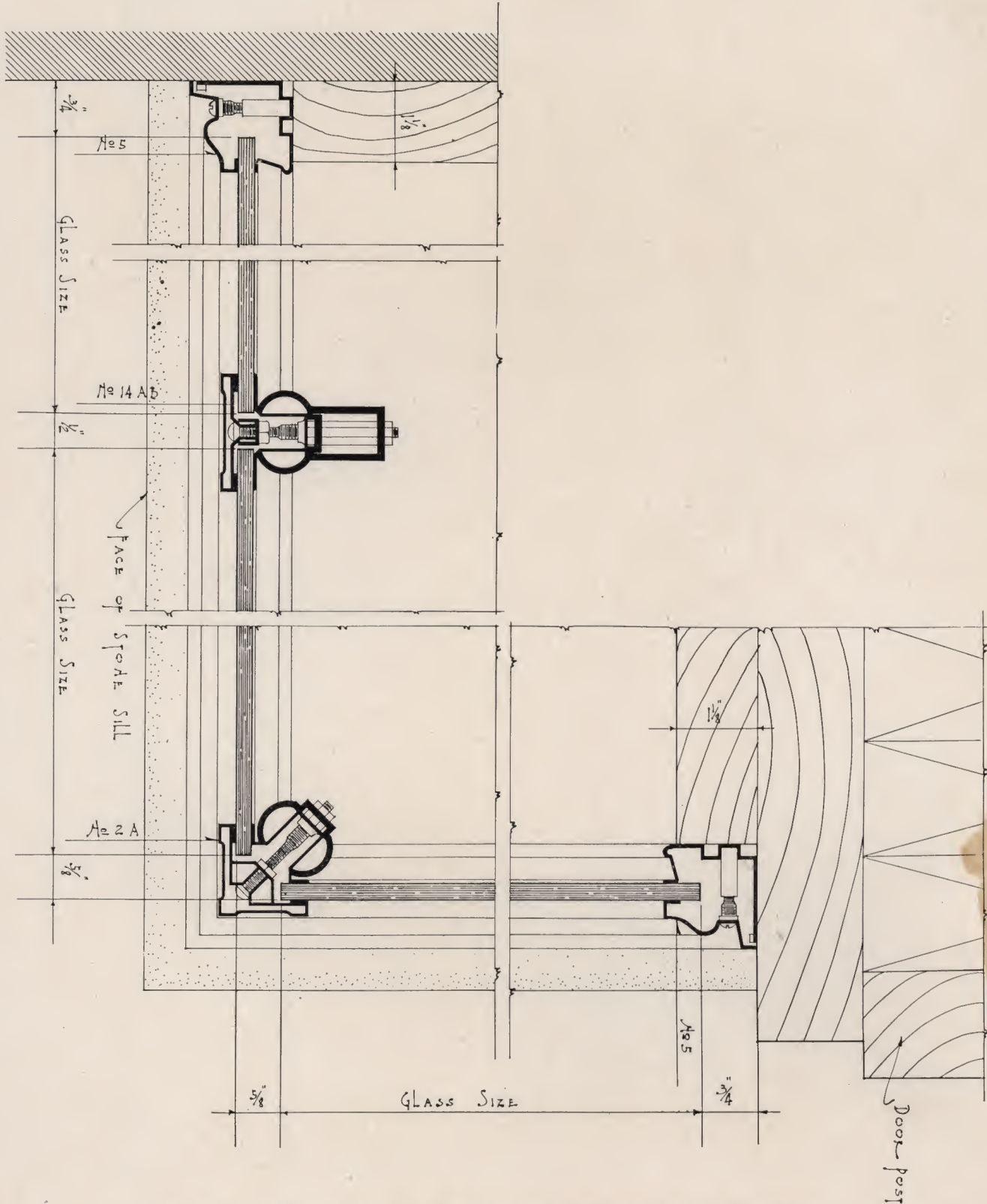
NO-41 HEAD AND SIDE JAMB
NO-101 CAN BE USED AT TOP
AND SIDE OF TRANSOM GLASS

REVERSE BAR NO. 8A



One-half full size detail plan, showing Nulock Sash with copper covered jamb, and sill, and incorporating No. 2A Corner Bar and No. 8A Reverse Corner Bar.

HORIZONTAL SECTION



One-half full size detail plan, showing Nulock Sash set directly on masonry, without wood jamb and sill.

BINSWANGER'S
NULOCK-SYSTEM
— STORE FRONTS —



MODERN FACTORY

25,000 Square Feet Floor Space



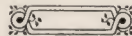
NULOCK-SYSTEM

Manufactured by the

SIOUX METAL PRODUCTS COMPANY

3000 Floyd Ave.

Sioux City, Iowa



ARCHITECTS AND CONTRACTORS

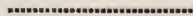
We have a modern factory, equipped with the latest improved machinery and are in position to make the highest standard of store front construction, giving you the best kind of service.

NULOCK-SYSTEM

Furnished in the following finishes:

NATURAL COPPER
POLISHED COPPER
STATUARY COPPER
SPOTTED OXIDIZED COPPER
GUN-METAL ON COPPER

NATURAL BRONZE
POLISHED BRONZE
STATUARY BRONZE
SATIN BRONZE
SPOTTED BRONZE



THERE IS A NULOCK STORE FRONT REPRESENTATIVE NEAR YOU.
WRITE US FOR HIS ADDRESS.

BINSWANGER & Co.
INCORPORATED

RICHMOND-MEMPHIS-HOUSTON-MIAMI

